
888 Boylston Street, Suite 510 Boston, MA 02199 T: 617.824.9100 F: 617.824.9101

To: Michael Hansen, NHDES

From: Tim O'Neill, Langan Eng & Env Svcs., Inc
Casey Raczkowski, Langan Eng & Env Svcs., Inc

Cc: Nathan Kirschner, Langan Eng & Env Svcs., Inc
Justin Dunn, Hillwood

Date: September 14, 2020

Re: Alteration of Terrain Permit Application #200630-092
Tax Maps 234, 239, Lots 5.34.35.1
Hudson, New Hampshire 03051
Langan Project No.: 151010101

Enclosed please find our responses to the Request for More Information dated August 5, 2020. Below please find each comment followed by our response in **bold**.

1. In order to align Alteration of Terrain administrative rule Env-Wq 1503.19(h) with statutory requirements of RSA 212-A:9, III, the NHDES adopted a rule amendment effective June 2, 2020. The department shall not issue an AOT permit unless the applicant demonstrates that all of the following criteria are met: As required by RSA 212-A:9, III, the project has been designed in a manner that will not "jeopardize the continued existence of [state- or federally-listed threatened or endangered] species or result in the destruction or modification of habitat of such species which is determined by the executive director [of the New Hampshire fish and game department (NHF&G)] to be critical", as demonstrated by the report of a study of the proposed project site that is performed by a wildlife biologist who has education and experience in performing property surveys for threatened or endangered species, using an accepted process such as that established in EPA's ecological risk assessment methodologies (<https://www.epa.gov/ecobox>), that is:

- a. Submitted to the department with the application and which demonstrates that:
 - i. No threatened or endangered species, designated critical habitat for threatened or endangered species, or travel corridors for threatened or endangered species is present on the site or potentially impacted by the project; or

COMMENT RESPONSE: A wildlife study titled "Wildlife Habitat Study" dated 8/17/220 was completed by Oak Hill Environmental. A copy of this study has been included with this comment response memo.

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- ii. If any threatened or endangered species, designated critical habitat for threatened or endangered species, or travel corridors for threatened or endangered species is present on the site or potentially impacted by the project, the applicant has coordinated with NHF&G on potential impacts of the proposed project thereon, such that the proposed project, including any conservation measures recommended by NHF&G to the benefit of the affected species, cannot reasonably be expected to jeopardize the continued existence of such species or result in the destruction or modification of designated critical habitat; and

COMMENT RESPONSE: *A wildlife study titled "Wildlife Habitat Study" dated 8/17/220 was completed by Oak Hill Environmental. A copy of this study has been included with this comment response memo.*

- b. Reviewed by the department in consultation with NHF&G.

It is highly recommended that you contact NHFG to discuss the scope of the study required for this site and proposed project.

COMMENT RESPONSE: *The applicant has been made aware of this recommendation and NHFG has been contacted and consulted related to the scope of the Wildlife Habitat Study.*

2. Please provide construction details for all stormwater BMP's.

COMMENT RESPONSE: *An infiltration basin detail has been provided on sheet CG504.*

3. Please provide field data for stormwater BMP's (test pit logs, seasonal high water, infiltration rates)

COMMENT RESPONSE: *Additional field testing has been performed in the locations of the stormwater BMP's. The collected data has been provided as an attachment to the revised stormwater report. Due to the large amount of earthwork and the currently active existing use on the site, many of the proposed BMP's location and elevations are inaccessible at this time. Additional testing is intended to be performed during construction.*

4. An Infiltration Feasibility Report is required pursuant to Env-Wq 1504.13. The infiltration feasibility report must include copies of the data sheets for measurement of infiltration rates.

COMMENT RESPONSE: *An interim copy of the Infiltration Feasibility report has been included as an appendix to the revised stormwater management report. It has*

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been populated with the most recent testing performed on the site and is intended to be completed during the construction phase when appropriate elevations and locations are accessible.

5. The Project Site has a Flood Zone A located in the south eastern corner of the project. Was a flood elevation determined for this zone as per Env-Wq 1503.09(c)(2) to determine if there are any impacts.

COMMENT RESPONSE: Flood Zone A existing in the south eastern region of the site along a section of Limit Brook. The flood zone is not being altered and will remain as is under existing conditions. Flood Zone AE is present along the western property line bordering the Merrimack River. Flood Zone AE is elevation based and two elevations are identified on the subject property. Cross section A of the FEMA Insurance Study Volume 3 Hillsborough County, New Hampshire (Flood Insurance Study Number 33011CV003A) is located on the project site. The southern flood elevation is listed at 110.06 ft and the northern portion is listed at elevation 111.00 ft. No filling is proposed below the elevation of 111.00 ft, therefore no negative impacts existing to the flood plain.

6. The Natural Heritage Bureau (NHB) identified threatened and/or endangered (T&E) species with the datacheck tool. Follow up with the NHB and NH Fish & Game Dept. as necessary to address concerns associated with T&E species, and how the requirements of Env-Wq 1503.19(h) can be met. Summarize how their comments are being addressed, and provide copies of correspondence to NHDES.

COMMENT RESPONSE: Copies of the requested correspondence have been included as an attachment with this submission.

7. Some of the storms distributions were run as Type II. Please correct these to Type III storms and resubmit analysis.

COMMENT RESPONSE: All storm distribution types have been revised to reflect Type III.

8. It has been indicated that changes are being made to the plans based on comments received from Wetlands Application. Please provide any changes with the resubmission.

COMMENT RESPONSE: The changes made in the wetlands application are reflected in the set attached to this resubmission.

9. For all the BMP Worksheets please provide all the geotechnical information for determining SHWT and depth to bedrock. Because of this information not being provided a complete evaluation of the stormwater systems has not been done.

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COMMENT RESPONSE: *A current geotechnical investigation report has been included as an appendix to the revised stormwater management report attached to this resubmission.*

10. Please provide information how the infiltration ponds were sized without infiltration rates being provided.

COMMENT RESPONSE: *Conservative infiltration rates were used in the initial design based on historic data. The infiltration rates have since been revised based on recent geotechnical investigations. Revised design infiltration rates are discussed in the stormwater management report included with this submission.*

11. Please address the comments and concerns raised by the Lower Merrimack River Local Advisory Committee.

COMMENT RESPONSE: *The comment response letter that was sent out to the Lower Merrimack River Local Advisory Committee is included with this resubmission.*

12. Please provide how an exfiltration rate of 1.5 (by contour) was determined.

COMMENT RESPONSE: *The 1.5 in/hour rate was determined by reducing the lowest infiltration rate found on the site by a half. The original design data was taken from the historic geotechnical information and has since been revised based on newly-collected data.*

13. Please provide the BMP worksheet for the Groundwater Recharge Volume (GRV) and on the BMP worksheet for the Groundwater Recharge Volume (GRV), indicate where the recharge will occur and calculate the volume which can be recharged at each practice. As a simplified check on recharge volume, the discarded flow during 1-year or 2-year storm can be referenced.

COMMENT RESPONSE: *The groundwater recharge volume work sheet included in the previous stormwater management report under appendix C has been revised to reflect the updated design. Table 5: Water Quality Volume and Groundwater Recharge Volume Summary included in the previous report has also been updated. A copy of this table has also been included on the BMP worksheet itself. All recharge volumes have been calculated using only volume in each infiltration practice below the lowest outlet form the feature. Modeled, infiltrated volume is not accounted for in the Groundwater Recharge Volume calculations.*

14. It doesn't appear that riprap sizing calculations were provided (Env-Wq 1504.09(d)).

COMMENT RESPONSE: *A Preformed Scour Hole Detail has been included on sheet CG502 which shows rip rap sizing calculations.*

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15. After any necessary revisions to the drainage analysis, submit a revised summary table of the 2-year, 10-year and 50-year pre- and post-development flows, as well as the 2-year pre- and post-development runoff volumes or 1-year flow (pre) as necessary to show compliance with the requirements of Env-Wq 1507.059(b). Also, include a revision date on the analysis, such as in the file name or in the Project Notes screen.

COMMENT RESPONSE: A revised model has been provided in the stormwater report as well an update peak rate and volume table. Section 3.5 Existing vs. Proposed Discharge Comparison describes the channel protection compliance based off of these findings.

16. When project activities are located within 50 feet of a water body or wetland, please show a double row of perimeter controls on the plans.

COMMENT RESPONSE: Soil erosion and sediment control plans reflect this comment.

17. Pursuant to *Env-Wq 1507.08, Long-Term Maintenance*, provide the following with the Inspection and Maintenance Manual:

- a. the names of the responsible party or parties who will implement the required inspections and reporting;

COMMENT RESPONSE: Upon obtaining all necessary approvals, Hillwood Enterprises, LP, as the owner of Hudson Logistics Center will operate the development and be responsible for implementing the required inspections and reporting

- b. an I&M log to document each I&M inspection and/or maintenance activity, (This is different than the inspection checklists. It is a table allowing for listing dates of inspections and by whom.);

COMMENT RESPONSE: An I&M log has been included in the I&M Manual.

- c. a deicing log;

COMMENT RESPONSE: A deicing log has been included in the I&M Manual.

- d. a plan clearly showing the locations of all the stormwater practices described in the I&M manual (8.5" x 11" or 11" x 17" sheet is recommended);

COMMENT RESPONSE: An 11x17 figure titled "STORMWATER MANAGEMENT FEATURES" has been included with the stormwater report.

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- e. actions to be taken if any invasive species grow in the stormwater management practices;

COMMENT RESPONSE: Note #4 of Meadow Mix Seed Notes has been added on sheet LP501.

- f. although not required by Env-Wq 1500, please also include a note indicating that inspection and maintenance records must be provided to DES upon request.

COMMENT RESPONSE: A note has been added to sheet CS002 stating that maintenance records are to be provided the NHDES upon request.

18. On the grading plan, show the location of a temporary construction exit, and call out that catch basin inlet protection and erosion control blankets are required.

COMMENT RESPONSE: The temporary construction entrance location varies based on the phase of construction and time of year. The temporary construction entrance is shown on the Soil Erosion & Sediment Control series. Showing these multiple location on the final, permanent condition grading plan may cause confusion and the incorrect entrance location to be installed at the incorrect time.

19. Construction Entrance Detail:

- a. Pursuant to Env-Wq 1506.09, the entrance must be 75 feet in length unless a 3 inch to 6 inch berm is installed.

COMMENT RESPONSE: The construction entrance detail on sheet CE503 and plan sheets reflect this requirement.

- b. The stone size must be a minimum of 3"

COMMENT RESPONSE: This requirement has been included in the construction entrance detail on sheet CE503.

20. Env-Wq 1503.21(c) requires that that the permit holder and a qualified engineer certify that the project was completed in accordance with the approved plans, or that deviations were made which did not require an amended or new permit. A permit condition will require this certification.

COMMENT RESPONSE: The applicant has been made aware of this requirement.

21. Please include a sediment trap detail in accordance with Env-Wq 1506.10.

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COMMENT RESPONSE: A sediment trap detail is included on sheet CE503.

22. Please add/or edit the following notes to your plans:

- Runoff must be directed to temporary practices until stormwater BMPs are stabilized.

COMMENT RESPONSE: The note has been added to sheet CE501.

- Stormwater ponds, infiltration basins and swales must be stabilized prior to directing runoff to them.

COMMENT RESPONSE: The note has been added to sheet CE501.

- Limit the area of disturbance to less than 5 acres at any time.

COMMENT RESPONSE: Due to the size and nature of the project, limiting site disturbance to less than 5 acres at any time is not feasible.

- Stabilized means:
 - In areas to be paved, base course gravels meeting the requirements of NHDOT Standard for Road and Bridge Construction, 2016, Item 304.2 have been installed.

COMMENT RESPONSE: A note has been added to sheet CE501 to reflect this.

a. For Infiltration Basin:

- Do not traffic exposed soil surface with construction equipment. If feasible, perform excavations with equipment positioned outside the limits of the infiltration system.

COMMENT RESPONSE: A note has been added to sheet CE501 to reflect this.

- After the infiltration system area is excavated to the final design elevation, the floor should be deeply tilled with a rotary tiller or disc harrow to restore infiltration rates, followed by a pass with a leveling drag.

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COMMENT RESPONSE: A note has been added to sheet CE501 to reflect this.

- Do not place infiltration systems into service until the contributing areas have been fully stabilized.

COMMENT RESPONSE: A note has been added to sheet CE501 to reflect this.

23. Pursuant to Env-Wq 1503.15(b), changes to the revised plans are to be called out and a revision date must be added to each page that has been changed. Graphical revision call-outs should be included on the plans. If any changes to the plans or the hydrologic/hydraulic analysis were made other than those identified above, please indicate what additional changes were made in your response letter. Please only send copies of revised plan sheets.

COMMENT RESPONSE: Since the design has changed so drastically since the previous submission, revision clouds have been shown on sheets CS100, CG100, CU100, LL100, and LP100. Revision dates have been updated on every revised sheet.

Comments received via email 08-19-2020:

1. Per Env-Wq 1504.10 Calculation of Water Quality Volume (WQV). Water quality volume (WQV) shall be calculated using the Unified Sizing Criteria as follows:
 - (b) "A" means the total area draining to the design structure
 - a. Pond A1-2 does not appear to have the correct total area on worksheet. It lists 22.71 acres but appears to have other areas draining to it. Please review and revise as necessary.

COMMENT RESPONSE: All drainage areas have been revised and coordinated.

- b. Pond B6-2 also appears to have incorrect total area draining to it on worksheet. Please review and revise.

COMMENT RESPONSE: All drainage areas have been revised and coordinated.

- c. Please check all worksheets to for this.

COMMENT RESPONSE: All drainage areas have been revised and coordinated.

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We trust you will find these responses satisfactorily address your comments. The revisions outlined above have been incorporated in the attached materials. Please feel free to contact me at either 203-784-3024 or nkirschner@langan.com with any questions or should you require additional information.

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Attachment A Hudson Wildlife Habitat Study



Oak Hill Environmental Services

August 17, 2020

RE: Hudson Logistics Center
Steel Road
Hudson, NH

Wildlife Habitat Study

Scope of Work and Assessment Objective

Oak Hill Environmental Services was retained by Langan Engineering and Environmental Services Inc. to perform a wildlife habitat study for the subject project area to make an assessment of the existing conditions and degree of impact and overall effect the proposed development project may have on the wildlife utilizing this site. The scope of this study includes: research of existing resource data maps (i.e. National Wetlands Inventory, NH Wildlife Habitat Land Cover, NH Highest Ranked Wildlife Habitat by Ecological Condition, Aerial Photos, Topographic and Soils maps); and walkover of the subject parcel to analyze both upland and wetland plant communities in context with adjoining properties and existing landscape and ecotone changes. Animal sightings and sign activity were noted of presence and location. An evaluation of wildlife habitat diversity and conditions that are present were also examined to determine the species which utilize study area and what potential wildlife species that may also be located in the study area. Several wildlife species were observed and physical evidence of animal presence are reported below.

There are distinct environmental factors to consider in assessing specific wildlife habitat, including, but not limited to: food source; water; cover (physical structure elements) and their spatial distribution in conjunction with specific requirements needed for individual animal species. The subject property wildlife movements were evaluated within the existing property boundaries and in the larger context with connecting wetlands and uplands within the broader landscape to determine travel corridors and highest use areas.

Existing Conditions

The subject property is approximately 372 acres in size. The property is located in the southern section of the state and is described as Appalachian Oak- Pine in the NH Wildlife Action Plan 2020 NH Wildlife Habitat Land Cover resource map. The dominant trees along the bank of the Merrimack River are Red Oak and White Pine. Red Maple and Gray Birch are also present. The shrub and herb layer is thin under the dense canopy of the mature trees along the Merrimack River bank. The Sagamore Bridge Roadway is close to the NW Property boundary creating a barrier to wildlife travel. Similarly, Lowell Road with commercial and residential properties near the Eastern property boundary forms a barrier and limits wildlife movements.

Most of the 372 acre property is a manicured golf course with 36 holes and related fairways and greens that are all closely aligned with very few trees interspersed throughout the golf course. The golf course area provides low wildlife habitat value because there are no areas of fallow native grass areas, meadows, thickets or expansive woodlands that would provide food sources. With no structural cover present for nesting, breeding and safety from predators, the golf course area does not provide the habitat required to support significant wildlife use. The riverine corridor along the Merrimack River is generally narrow and steep with mature White Pine and Red Oak growing as the dominant species. Within the Merrimack River's riverine corridor, the river bank drops abruptly resulting in a steep elevation drop. There is no emergent vegetation present within the river at this location due to the steep elevation and scouring occurring with the River's current.

Wildlife travel/usage patterns within the golf course showed no sign of tracks and scat. The predominant areas where animals and their particular sign were observed are the following:

--Woodchuck *Marmota monax*, Red tailed Hawk *Buteo j.* and Northern Flicker *Colaptes auratus*, were observed along tree line of the Merrimack River.

--Red fox *Vulpes v.*, coyote *Canis latrans* and White-tailed deer *Odocoileus v.* are probable species utilizing this narrow forested corridor along the Merrimack River, but due to the barriers of the roadways to the north and east of the property, terrestrial animals movements are limited and directed to the south towards the utility corridor and. The utility corridor is south of the subject property and extends from the Merrimack River to the northeast and east. Utility corridors provide significant plant community diversity and a complexity of wildlife habitats for a number of different species. This corridor creates a variety of ecotone changes and provides many of the critical wildlife habitat elements required to support multiple species and is considered a major use wildlife travel corridor for this area. Probable animal species utilizing this habitat are: Wild Turkey *Meleagris g.*; Ruffed Grouse *Bonasa U.*; Coyote; White tailed Deer; Red Fox; Hawks; Owls; woodchuck; fisher *Martes p.*; skunk, and small mammals such as mice, moles and shrew.

Great Blue heron *Ardea h.* and Bald eagle *Haliaeetus l.* utilize the Merrimack River, and some tall white pines are present and may serve as perch trees along this section of the Merrimack River as sightings have increased upstream and downstream over the last several years.

The Merrimack River and the narrow mature tree buffer along the west side of the property provides some habitat for raptors but very little habitat for neotropical migratory birds due to the lack of a shrub and herb layer required for their specific needs. Wetlands in the eastern section of the property provides some habitat for amphibians, reptiles and birds, however, the proposed project will have minimum impacts to these wetland areas.

Wildlife Impacts

When assessing the degree of potential impacts to wildlife and wildlife habitat and the overall effect the proposed development project may have on wildlife utilizing this property, both the individual property and its location within the context of the surrounding larger ecosystems and significant roadway obstructions present are considered collectively. The subject parcel is located a significant distance (1 mile) from notable areas that support a variety of wildlife as designated on the Supporting Landscape on the Wildlife Habitat Ecological Conditions Map and the designated Highest Ranked Habitat in New Hampshire. These resource maps depict those areas in the vicinity of the proposed project that possess the required elements and attributes to support a variety of wildlife species. These high ranked wildlife habitat areas include the expansive undeveloped areas along the upper watershed of Limit Brook and Musquach Brook which are located approximately 1.5 miles northeast from the property. This area beyond Lowell Road is clearly supporting a variety of wildlife. The subject property provides wildlife habitat mostly around the perimeter of the property to the west, east and south where there is clearly less human activity.

We understand there are plans to extend and enhance the vegetated buffer along the Merrimack River in order to preserve and protect important wildlife habitat. In addition, we also understand that existing wetland areas along the eastly side of the property will also be preserved in order to protect important wildlife habitat by providing additional cover for animal movement than exist today and provide a variety of plant species to enhance the buffer to the wetlands. And although certain wetland crossings to the east are proposed to provide access to the developable portions of the property, these crossings will not significantly interfere with wildlife movement and wildlife habitat. The loss of the golf course area will be an aesthetic change but will not result in the loss of important wildlife habitat. Current animal movements and related corridors are predominantly located around the perimeters of the property and will continue to be utilized by wildlife. Moreover, the predominant wildlife travel corridor to the south and east will not be impacted by the proposed project as buffers are being designed to both preserve and protect important wildlife habitat in these areas.

Species of Concern

Bald eagle *Haliaeetus l.* is present in many of the reaches of the Merrimack River over the last decade and utilizes tall trees close to the water for resting and hunting for fish. Their presence has been reported at several locations in the southern part of the state and likely they would be moving through and utilizing this section of the river. Because the tree canopy along the Merrimack River will be preserved, and the vegetated buffer along the westerly property boundary abutting the Merrimack River will be extended and enhanced, the impact to this species as a result of this project will be less affected compared to current activities associated with a golf course. The greater portion of the project area is occupied by golfers, carts, maintenance workers and mowing machinery on a daily bases with cars, trucks, entering and leaving. The large human element presence combined with continuous noise levels have already impacted the behavior of

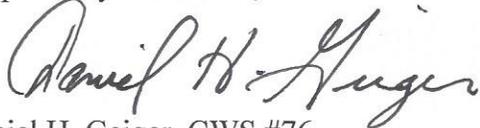
eagles that have visited this section of the Merrimack River. Bald eagles tend to avoid areas where large populations of humans congregate and are active in the landscape. The risk to the Bald eagle will not be elevated with the implementation of this project. The activity to the buildings is primarily to the middle of the property and away from the Merrimack River. The proposed expansion of the buffer to the Merrimack River and the change of removing the constant human activity close to the river will actually provide an added benefit for the eagle's privacy if they choose to roost nearby.

Endangered Species

The NH Natural Heritage Bureau has a record of the Eastern Box Turtle *Terrapene Carolina*, State Endangered, approximately 1.5 miles east of the subject property within the Limit Brook watershed, and east of Lowell Road. Special Habitat requirements, including old fields, powerline clearings, ecotones with sandy soils which are seldom far from water are favored. Their habitat includes woodlands (open deciduous), field edges, thickets, marshes, bogs, and stream banks. These habitat requirements are present in the eastern section of Limit Brook beyond Lowell Road but are not present within the golf course property. Because of the lack of critical habitat, cover, and navigation obstacles, there is low potential for the Eastern box turtles to utilize this property.

For these reasons, the proposed project will preserve and protect important wildlife habitat and maintain ecological balance, and the proposed project minimizes any potential degradation of land situated within important wildlife areas of the property, which in turn, will minimize the potential for adverse impacts to functions and values of these areas of the property in their capacity to support wildlife.

Respectfully Submitted,



Daniel H. Geiger, CWS #76,



Oak Hill Environmental Services

Oak Hill Environmental Services provides professional environmental guidance, planning, and services to private individuals, companies, engineers, municipalities, and state and federal agencies. Oak Hill Environmental Services specializes in:

- **Environmental Reviews, Studies and Regulations**
- **USACOE Jurisdictional Wetland Delineation**
- **Wetlands: Permitting (local, state and federal), Evaluations, Functional Assessments, and Restorations**
- **Wildlife Ecology, Habitat Studies, Rare and Endangered Species**
- **Perform fresh water mussel surveys to determine presence of state or federally listed endangered species.**
- **Land Use Planning and Natural Resource Assessments**

Daniel H. Geiger, CWS, Owner

Over 25 years of experience as a practicing wetland scientist in New Hampshire, Maine, Massachusetts and Vermont.

Education

Bachelor of Science, Wildlife Biology/Botany, University of Montana
Advanced Studies in Wetland Science; Rutgers University/Cook College and the University of Massachusetts at Amherst.

Professional Certifications

New Hampshire Certified Wetland Scientist No. 76

Approved as qualified by the US Fish and Wildlife Service to conduct freshwater mussel surveys for assessing impacts to the federal/state endangered species, Dwarf wedgemussel *Alasmidonta heterodon*, and Brook floater *Alasmidonta varicosa*.

Professional History

1995 – Present	Oak Hill Environmental Services, Owner (Environmental Consulting)
1985 – 1995	New Hampshire Department of Transportation, Bureau of Environment, (Senior Environmental Manager)
1975-1980	US Forest Service, Fire Control/ Smokejumper, Region 1

Professional Affiliations

New Hampshire Association of Wetland Scientists, Past President

New Hampshire Association of Natural Resource Scientists

Appointed to State of New Hampshire, Joint Board of Natural Scientists, 2009-2013.

Honored by the New Hampshire Audubon as a life member for the Osprey Nesting Sites program.

Past Member of Town of Loudon Conservation Commission, 12 years.

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Attachment B NHB Correspondence

Brendan Quigley

From: Brendan Quigley
Sent: Monday, August 31, 2020 1:02 PM
To: 'Doperalski, Melissa'
Subject: RE: NHB review: NHB20-0672

Melissa, Can we discuss this please?

Brendan Quigley
Wetland Scientist/GIS Specialist

GOVE ENVIRONMENTAL SERVICES, INC.

8 Continental Dr, Bldg 2, Unit H,
Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Brendan Quigley
Sent: Thursday, August 20, 2020 1:25 PM
To: Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>
Subject: RE: NHB review: NHB20-0672

Melissa,

The attached report was done by Dan Geiger for this Hillwood project in Hudson. Im hoping this can advance the review for this project, which has been stalled for a bit. AOT has issued comments and they are in the process of addressing them (the need for a wildlife report was of course one of the comments). I will likely be able to submit wetland response sooner than they will be able to get the AOT turned around. We need to know what additional details you need to see or what questions you have in order to move this along. Please give me a call on my cell phone if you have time to discuss.

Brendan Quigley
Wetland Scientist/GIS Specialist

GOVE ENVIRONMENTAL SERVICES, INC.

8 Continental Dr, Bldg 2, Unit H,
Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Brendan Quigley
Sent: Friday, June 12, 2020 10:41 AM
To: Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>
Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>
Subject: RE: NHB review: NHB20-0672

Melissa,

I realize this was not a complete response but wanted to make sure you get it and are following along. I also just copied you on an email sent to Amy Lamb regarding Wild Lupin, or lack thereof, as it relates to Ducky Wing. Let me know if you have any questions.

Thank You,

Brendan Quigley
Wetland Scientist/GIS Specialist

GOVE ENVIRONMENTAL SERVICES, INC.

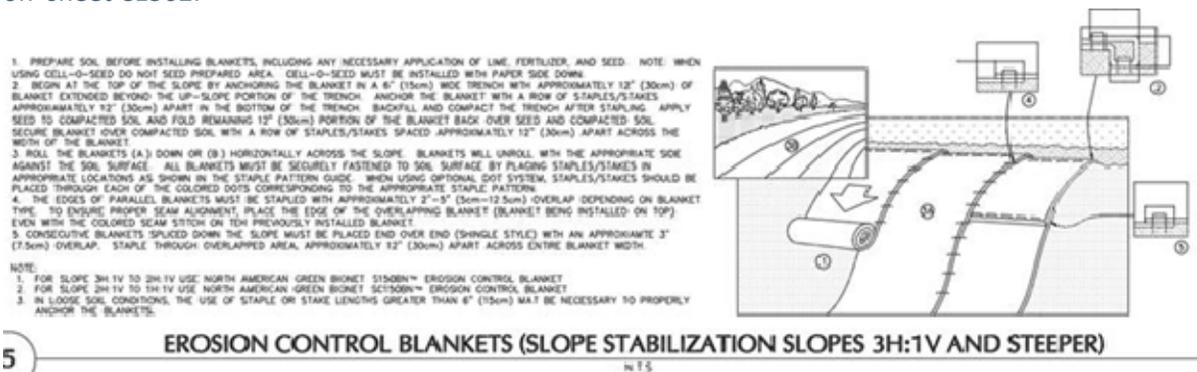
8 Continental Dr, Bldg 2, Unit H,
Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Brendan Quigley
Sent: Friday, June 5, 2020 3:38 PM
To: Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>
Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>
Subject: RE: NHB review: NHB20-0672

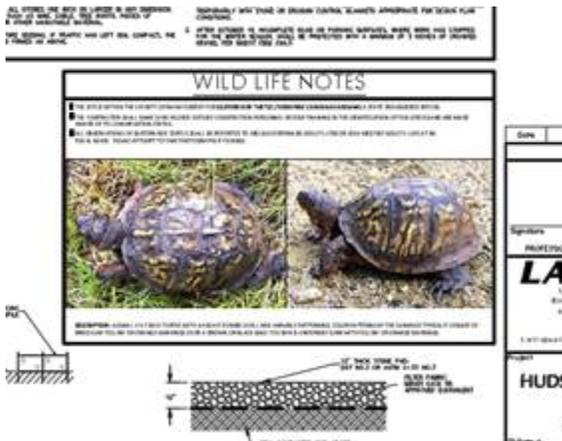
Hi Melissa,

I have an update and some information for you. The AOT permit application is being submitted next week. As we discussed earlier this month the following items have been incorporated into the plans:

1. Erosion control blankets are specified to be S150BN or SC150BN which are the all-natural fiber alternatives offered by North American Green and recommended by Fish & Game for past projects. This info can be found on sheet CE502.



2. The attached wildlife notes and Box Turtle Information have been added to sheet CE501



- There are some structures in the drainage system that still have sumps: I'm told that the dry wells in infiltration basins A6-2 and B6-4 cannot be converted to underdrains (as I requested be done with the others) due to elevations. Also there is a vegetated swale on southern end of Lot B that has a catch basin in it with no sump BUT it does lead to other sumped catch basins downstream. Engineer is currently saying these are required. The AOT will be submitted next week so if these items are an issue we will have to bring them into the discussion and see if there is any alternative.

If you have any questions don't hesitate to let me know.

Thank You,

Brendan Quigley
Wetland Scientist/GIS Specialist

GOVE ENVIRONMENTAL SERVICES, INC.
8 Continental Dr, Bldg 2, Unit H,
Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Brendan Quigley
Sent: Thursday, May 7, 2020 9:39 AM
To: Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>
Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>; Lamb, Amy <Amy.Lamb@dncr.nh.gov>
Subject: RE: NHB review: NHB20-0672

Melissa,

See below. Looking to get an idea of what standard practices should be employed for Eastern Box Turtle and how we should handle Perseus Dusky Wing. Ive attached the impact plan and an overview figure that are included in the Dredge and Fill being submitted today. The full plan set is large but can be made available as a download link or if you have any specific request please let me know.

Amy, The plant surveys will be taking place according to you suggestions, Ill keep you updated

Brendan Quigley
Wetland Scientist/GIS Specialist

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Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Brendan Quigley
Sent: Tuesday, April 21, 2020 2:55 PM
To: Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>
Cc: Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>; 'Lamb, Amy' <Amy.Lamb@dn-cr.nh.gov>
Subject: RE: NHB review: NHB20-0672

Hi Melissa,

This is an opening email about the large project on the golf course in Hudson. I'm mostly asking about about Perseus Dusky Wing as I have not dealt with this like this before and I've included Amy because of the Wile Lupine association. Just looking to get an idea of what will be required here, like if we will need an entomologist or if this will be a search for Wild Lupine. I've attached the latest overall plan for reference. I don't yet have detailed plans that show drainage or restoration along the river. I know you'll want those for a full review and I'll get them to you those as soon as I have something but was hoping you could confirm what standard practices will apply for Eastern Box (i.e. natural fiber rolled erosion control, ID and contact info on plans, exclusionary fencing, no-sumps in drained structures, sloped curbing, ect. I think it will be really helpful to have them include all this sort of stuff from the beginning rather than trying to get them to make changes. Let me know if you have any questions.

Thank You

Brendan Quigley
Wetland Scientist/GIS Specialist

GOVE ENVIRONMENTAL SERVICES, INC.

8 Continental Dr, Bldg 2, Unit H,
Exeter, NH 03833-7507
Ph (603) 778-0644 / Cell (603) 686-0086 / Fax (603) 778-0654
bquigley@gesinc.biz

From: Lamb, Amy [<mailto:Amy.Lamb@dn-cr.nh.gov>]
Sent: Thursday, April 2, 2020 4:52 PM
To: Info Mail <InfoMail@GOVEEnvironmental.onmicrosoft.com>
Cc: Mauck, Ridgely <Addison.Mauck@des.nh.gov>; Doperalski, Melissa <Melissa.Doperalski@wildlife.nh.gov>; Tuttle, Kim <Kim.Tuttle@wildlife.nh.gov>; Rennie, Craig <Craig.Rennie@des.nh.gov>
Subject: RE: NHB review: NHB20-0672

Attached, please find the review we have completed. If your review memo includes potential impacts to plants or natural communities, please contact me for further information. If your project had potential impacts to wildlife, please contact NH Fish and Game at the phone number listed on the review.

Best,
Amy

Amy Lamb
Ecological Information Specialist

NH Natural Heritage Bureau
DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301
603-271-2834

Amy Lamb
Ecological Information Specialist
(603) 271-2834
amy.lamb@dncr.nh.gov

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DNCR - Forests & Lands
172 Pembroke Rd
Concord, NH 03301